

CLAIMS:

1. (Currently Amended) A liquid crystal display comprising:

a panel substantially tessellated by a subpixel repeating group comprising differently colored and individually addressable subpixels and having an even number of individually addressable subpixels including a first colored subpixel, a second colored subpixel and a third colored subpixel, which have different colors from each other, in a row, said subpixel repeating group further comprising a column of first colored subpixels, where the color of said first colored subpixels is one to which the human visual system has lower luminance change sensitivity than to other colors of other colored ones of the subpixels in the subpixel repeating group; and

a driver circuit sending to the panel, image signals representing image data ~~where the driver circuit uses a substantially periodic dot inversion polarity scheme~~;

wherein said driver circuit uses a substantially periodic selectively violates the dot inversion polarity scheme at one or more of the columns of first colored subpixels such that potential image degradation introduced by ~~said violation of~~ the periodic dot inversion polarity scheme is localized on said one or more of the columns of first colored subpixels.

2. (Previously Presented) The liquid crystal display of Claim 1 wherein the first colored subpixels are blue colored subpixels.

3. (Original) The liquid crystal display of Claim 1 wherein said subpixel repeating group substantially comprises a checkerboard of red and green subpixels interspersed with two columns of blue subpixels.

4. (Previously Presented) The liquid crystal display of Claim 3 wherein for each said subpixel repeating group said two columns of blue subpixels share a same column driver.

5. (Previously Presented) The liquid crystal display of Claim 1, wherein a correction signal is applied to one or more of the subpixels at which the violation of the periodic dot inversion polarity scheme occurs and the applied a correction signal counters a loss of luminance caused by the violation.

6-7. (Canceled)

8. (Currently Amended) A method of providing a substantially periodic dot inversion polarity scheme in a liquid crystal display having a panel that is substantially tessellated by a subpixel repeating group comprising differently colored and individually addressable subpixels and having an even number of individually addressable subpixels including a first colored subpixel, a second colored subpixel and a third colored subpixel, which have different colors from each other, in a row, said subpixel repeating group further comprising a column of first colored subpixels where the color of said first colored subpixels is one to which the human visual system has lower luminance change sensitivity than to other colors of other colored ones of the subpixels in the subpixel repeating group[[;]], the method comprising:

providing driver signals to the subpixels in the panel ~~where the driver signals define image data having a substantially periodic dot inversion polarity scheme applied thereto~~, wherein said providing of the driver signals uses a substantially periodic selectively violates ~~the~~ dot inversion polarity scheme at one or more of the columns of first colored subpixels such that potential image degradation introduced by the periodic dot inversion polarity scheme violation is localized on the column of first colored subpixels.

9. (Previously Presented) The method of Claim 8, wherein the column of first colored subpixels is a column of blue subpixels.

10. (Previously Presented) The method of Claim 8, wherein the subpixel repeating group is characterized by a checkerboard of red and green subpixels interspersed with two columns of blue subpixels.

11. (Previously Presented) The method of Claim 10, wherein for each subpixel repeating group the providing driver signals includes providing of scheme violating signals to the two columns of blue subpixels from a same column driver.

12. (Previously Presented) The method of Claim 8, further comprising: providing correction signals to one or more subpixels in the group of subpixels at which the violation of the periodic dot inversion polarity scheme occurs, where the provided correction signals counter loss of luminance caused by the violation .

13. (Currently Amended) A method of providing a substantially periodic dot inversion polarity scheme in a liquid crystal display having a panel that is substantially tessellated by a subpixel repeating group comprising differently colored and individually addressable subpixels and having an even number of individually addressable subpixels including a first colored subpixel, a second colored subpixel and a third colored subpixel, which have different colors from each other, in a row, said subpixel repeating group further comprising at least one column of blue subpixels; and the method comprising:

providing signals for image data having a substantially periodic dot inversion polarity scheme to the panel with use of a driver circuit outputting at least two phases ~~where each of the phases periodically violates the dot inversion polarity scheme and the point of violation is selected~~ such that it primarily impacts the at least one column of blue subpixels.

14. (Original) The method of claim 13, further comprising providing a correction signal to one or more subpixels.

15. (Currently Amended) A liquid crystal display, comprising:
a display panel including a plurality of subpixels arranged in a subpixel repeating group; said subpixel repeating group comprising an even number of subpixels including a first colored subpixel, a second colored subpixel and a third colored subpixel, which have different colors from each other, in a row, and including a column of dark colored subpixels; and

means for providing driver signals to the subpixels in the display panel to send image data having a dot inversion polarity scheme such that image degradation introduced by the driver signals is localized on the column of dark colored subpixels.

16. (Original) The liquid crystal display of Claim 15, wherein the column of dark colored subpixels is a column of blue subpixels.

17. (Previously Presented) The liquid crystal display of Claim 15, wherein said subpixel repeating group comprises a checkerboard of red and green subpixels interspersed with two columns of blue subpixels.

18. (Previously Presented) The liquid crystal display of Claim 17, wherein said means for providing driver signals provides signals to the two columns of blue subpixels from a same column driver.

19. (Original) The liquid crystal display of Claim 15, further comprising:
means for providing correction signals to one or more subpixels in the group of subpixels.

20. (Currently Amended) A liquid crystal display, comprising:
display means including a plurality of subpixels arranged in accordance with a panel tessellating subpixel repeating group, the subpixel repeating group being characterized by an even number of subpixels including a first colored subpixel, a second colored subpixel and a third colored subpixel, which have different colors from each other, in a row and including at least one column of blue subpixels; and

driving means for providing signals for image data having a dot inversion polarity scheme to the display means; said driving means having at least two phases selected such that potential image degradation introduced by the dot inversion polarity scheme each of the phases periodically violates the dot inversion polarity scheme and the point of violation is placed substantially upon the at least one column of blue subpixels.

21. (Previously Presented) The liquid crystal display of Claim 20, further comprising:

means for providing a correction signal to one or more subpixels.

22-24. (Canceled)

25. (Previously Presented) The method of Claim 13, wherein the said use of a driver circuit comprises providing a plurality of two-phase driver chips for driving respective bounded sections of the display ; and wherein phases of each provided driver chip are selected such that any parasitic effects placed upon imagery of any of the subpixels driven by said phased signals are placed substantially upon subpixels disposed in columns positioned at a boundary of the bounded display sections respectively driven by said driver chips.

26. (Previously Presented) The liquid crystal display of Claim 20, wherein said driving means includes a plurality of two-phase driver chips each for providing signals for the image data having the polarity scheme to respective bounded sections of the display means; the phases of each driver chip being selected such that any parasitic effects placed upon imagery of any of the subpixels driven by said signals are placed substantially upon blue subpixels disposed in columns positioned at a boundary of the bounded display sections respectively driven by said driver chips.

27. (Canceled)

28. (Previously Presented) The liquid crystal display of Claim 1 wherein said driver circuit sends signals indicating image data having a polarity scheme to the panel such that at least two adjacent subpixels in a row have the same polarity.

29. (Previously Presented) The liquid crystal display of Claim 15 wherein said means for providing driver signals includes a plurality of two-phase driver chips for sending said driver signals to the display panel; the phases of each driver chip being selected such that scheme violations introduced by said driver signals are placed substantially upon blue subpixels disposed in columns positioned at a boundary between said driver chips.

30. (Previously Presented) The liquid crystal display of Claim 1, wherein the image degradation is caused by same-color subpixels of same polarity occurring successively one after the next .

31. (Previously Presented) The liquid crystal display of Claim 13, wherein the violation tends to cause image degradation due to parasitic effects of parasitic capacitances present in the panel.